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| The Maharaja Sayajirao University of Baroda<br>Polytechnic<br>Diploma in Electronics & Communication Engg.<br>(HPP) |                                                                                                                                                                                                                                            |                  | ACADEMIC YEAR<br>2021-22 |          |
| Year - I                                                                                                            | WORKSHOP PRACTICE-1 (MEC3111L)                                                                                                                                                                                                             | Lab Hrs per week | 2                        |          |
| Semester - I                                                                                                        |                                                                                                                                                                                                                                            | Max marks        | 50                       |          |
|                                                                                                                     |                                                                                                                                                                                                                                            |                  |                          |          |
| CO1                                                                                                                 | Identify needs of safety precautions, safety aids and first aids during workshop practice.                                                                                                                                                 |                  |                          |          |
| CO2                                                                                                                 | Use of measuring instruments, cutting, finishing, bending, hammering tools and work holding devices to produce specific job.                                                                                                               |                  |                          |          |
| CO3                                                                                                                 | Perform cutting, marking and finishing operations in fitting and carpentry work.                                                                                                                                                           |                  |                          |          |
| CO4                                                                                                                 | Perform cutting, marking, bending, joining and plumbing operations in smithy and sheet metal work.                                                                                                                                         |                  |                          |          |
|                                                                                                                     |                                                                                                                                                                                                                                            |                  |                          |          |
| BT                                                                                                                  | 1. Remember 2. Understand 3. Application 4. Analysis 5. Evaluation 6. Creation                                                                                                                                                             |                  |                          |          |
| COURSE CONTENT/SYLLABUS                                                                                             |                                                                                                                                                                                                                                            |                  |                          |          |
| Unit                                                                                                                | Unit Name                                                                                                                                                                                                                                  | Hrs              | Weightage                | CO       |
| 1                                                                                                                   | Familiarization with basic usual working procedure and practices in a workshop including procedure about safety-clothing-first aid etc.                                                                                                    | 2                | 2                        | CO1      |
| 2                                                                                                                   | CARPENTRY SHOP: i) Identification, correct method of handling and using, all hand tools and measuring instruments. ii) Basic wood working operations. One job is to be set which will include the practice of all basic operation.         | 7                | 12                       | CO2, CO3 |
| 3                                                                                                                   | FITTING SHOP: i) Identification, correct method of handling and using, all hand tools and measuring Instruments. ii) Basic fitting operations. One job is to be set which will include the practice of all basic operation.                | 7                | 12                       | CO2, CO3 |
| 4                                                                                                                   | SMITHY SHOP i) Identification, correct method of handling and using, all smithy tools and measuring instruments. ii) Basic black smith operations. One job is to be set which will include the practice of all basic operation.            | 7                | 12                       | CO2 ,CO4 |
| 5                                                                                                                   | TIN SMITHY & PLUMBING Identification, correct method of handling and using Tools. Basic operations such as cutting, bending, joining, soldering brazing, etc. One job is to be set which will include the practice of all basic operation. | 7                | 12                       | CO2, CO4 |
|                                                                                                                     |                                                                                                                                                                                                                                            | 30               | 50                       |          |
| REFERENCE BOOKS:                                                                                                    |                                                                                                                                                                                                                                            |                  |                          |          |
| 1.                                                                                                                  | All about machine tools : Gerling                                                                                                                                                                                                          |                  |                          |          |
| 2.                                                                                                                  | Wabsterman Tables                                                                                                                                                                                                                          |                  |                          |          |